



22259-10-1US.ST25.txt
SEQUENCE LISTING

<110> GARREN, Hideki
HO, Peggy P.
STEINMAN, Lawrence

<120> METHODS AND IMMUNE MODULATORY NUCLEIC ACID COMPOSITIONS FOR
PREVENTING AND TREATING DISEASE

<130> 022259-001010US

<140> 10/524,643
<141> 2005-02-10

<150> PCT/US2003/037157
<151> 2003-11-21

<160> 296

<170> PatentIn version 3.3

<210> 1
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 1
gtggtt

6

<210> 2
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 2
atggtt

6

<210> 3
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 3
gcgggtt

6

<210> 4
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 4
acgggtt

6

22259-10-1US.ST25.txt

<210> 5
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 5
gtggct 6

<210> 6
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 6
atggct 6

<210> 7
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 7
gcggct 6

<210> 8
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 8
acggct 6

<210> 9
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 9
gtggtc 6

<210> 10
<211> 6
<212> DNA
<213> Artificial Sequence

22259-10-1US.ST25.txt

<220>
<223> immunomodulatory oligonucleotide

<400> 10
atggtc 6

<210> 11
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 11
gcggtc 6

<210> 12
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 12
acggtc 6

<210> 13
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 13
gtgctt 6

<210> 14
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 14
atgctt 6

<210> 15
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 15
gcgcct 6

22259-10-1US.ST25.txt

<210> 16
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 16
acgctt 6

<210> 17
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 17
gtgcct 6

<210> 18
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 18
atgcct 6

<210> 19
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 19
gcgcct 6

<210> 20
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 20
acgcct 6

<210> 21
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

22259-10-1US.ST25.txt

<400> 21	6
gtgctc	
<210> 22	
<211> 6	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> immunomodulatory oligonucleotide	
<400> 22	6
atgctc	
<210> 23	
<211> 6	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> immunomodulatory oligonucleotide	
<400> 23	6
gcgctc	
<210> 24	
<211> 6	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> immunomodulatory oligonucleotide	
<400> 24	6
acgctc	
<210> 25	
<211> 6	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> immunomodulatory oligonucleotide	
<400> 25	6
ggggtt	
<210> 26	
<211> 6	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> immunomodulatory oligonucleotide	
<400> 26	6
agggtt	
<210> 27	
<211> 6	

22259-10-1US.ST25.txt

<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 27
gaggtt 6

<210> 28
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 28
aagggtt 6

<210> 29
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 29
ggggct 6

<210> 30
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 30
agggct 6

<210> 31
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 31
gaggct 6

<210> 32
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 32

aaggct

<210> 33
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 33
ggggtc

6

<210> 34
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 34
agggtc

6

<210> 35
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 35
gaggtc

6

<210> 36
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 36
aaggtc

6

<210> 37
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 37
gggctt

6

<210> 38
<211> 6
<212> DNA
<213> Artificial Sequence

22259-10-1US.ST25.txt

<220>		
<223>	immunomodulatory oligonucleotide	
<400>	38	
aggctt		6
<210>	39	
<211>	6	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	immunomodulatory oligonucleotide	
<400>	39	
gagctt		6
<210>	40	
<211>	6	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	immunomodulatory oligonucleotide	
<400>	40	
aagctt		6
<210>	41	
<211>	6	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	immunomodulatory oligonucleotide	
<400>	41	
gggcct		6
<210>	42	
<211>	6	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	immunomodulatory oligonucleotide	
<400>	42	
aggcct		6
<210>	43	
<211>	6	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	immunomodulatory oligonucleotide	
<400>	43	
gagcct		6

22259-10-1US.ST25.txt

<210> 44
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 44
aagcct 6

<210> 45
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 45
gggctc 6

<210> 46
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 46
aggctc 6

<210> 47
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 47
gagctc 6

<210> 48
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 48
aagctc 6

<210> 49
<211> 6
<212> DNA
<213> Artificial Sequence

<220>

22259-10-1US.ST25.txt

<223> immunomodulatory oligonucleotide

<400> 49

aacgtt

6

<210> 50

<211> 6

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<400> 50

aagggtt

6

<210> 51

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> peptide antigen

<400> 51

Gly Asp Leu Leu Ala Glu Ile Glu Thr Asp Lys Ala Thr Ile
1 5 10

<210> 52

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<400> 52

tgactgtgaa ggtagagat ga

22

<210> 53

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<220>

<221> misc_feature

<222> (13)..(14)

<223> nn is GpG or non-GpG

<400> 53

tgactgtgtg rrnnnyagag atga

24

<210> 54

<211> 24

<212> DNA

<213> Artificial Sequence

22259-10-1US.ST25.txt

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (13)..(14)
<223> nn is GpG or non-GpG

<400> 54
tgactgtgtg rynnyyagag atga

24

<210> 55
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (1)..(10)
<223> n is any nucleotide

<220>
<221> misc_feature
<222> (13)..(14)
<223> nn is GpG or non-GpG

<220>
<221> misc_feature
<222> (17)..(26)
<223> n is any nucleotide

<400> 55
nnnnnnnnnnn rynnyyynnnn nnnnnn

26

<210> 56
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (1)..(10)
<223> n is any nucleotide

<220>
<221> misc_feature
<222> (13)..(14)
<223> nn is GpG or non-GpG

<220>
<221> misc_feature
<222> (17)..(26)
<223> n is any nucleotide

<400> 56
nnnnnnnnnnn rrnnnyyynnnn nnnnnn

26

22259-10-1US.ST25.txt

<210> 57
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 57
gggggggggg aagggttgggg gggggg 26

<210> 58
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 58
gggggggggg atgggttgggg gggggg 26

<210> 59
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 59
gggggggggg acgggttgggg gggggg 26

<210> 60
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 60
gggggggggg aagcttgggg gggggg 26

<210> 61
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 61
gggggggggg atgcttgggg gggggg 26

<210> 62
<211> 26
<212> DNA
<213> Artificial Sequence

22259-10-1US.ST25.txt

<220>
<223> immunomodulatory oligonucleotide

<400> 62
ggggggggggg acgcttgggg gggggg 26

<210> 63
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 63
cccccccccc aaggttcccc cccccc 26

<210> 64
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 64
cccccccccc atggttcccc cccccc 26

<210> 65
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 65
cccccccccc acggttcccc cccccc 26

<210> 66
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 66
cccccccccc aagttcccc cccccc 26

<210> 67
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 67
cccccccccc atgcttcccc cccccc 26

22259-10-1US.ST25.txt

<210> 68
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 68
cccccccccc acgcttcccc cccccc 26

<210> 69
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 69
tgactgtgaa gcttagagat ga 22

<210> 70
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 70
tgactgtgaa gctcagagat ga 22

<210> 71
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 71
tgactgtgaa gcctagagat ga 22

<210> 72
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 72
tgactgtgaa gcccagagat ga 22

<210> 73
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

22259-10-1US.ST25.txt

<400> 73		
tgactgtgag gcttagagat ga		22
<210> 74		
<211> 22		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> immunomodulatory oligonucleotide		
<400> 74		
tgactgtgag gtcagagat ga		22
<210> 75		
<211> 22		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> immunomodulatory oligonucleotide		
<400> 75		
tgactgtgag gcctagagat ga		22
<210> 76		
<211> 22		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> immunomodulatory oligonucleotide		
<400> 76		
tgactgtgag gcccagagat ga		22
<210> 77		
<211> 22		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> immunomodulatory oligonucleotide		
<400> 77		
tgactgtgga gcttagagat ga		22
<210> 78		
<211> 22		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> immunomodulatory oligonucleotide		
<400> 78		
tgactgtgga gtcagagat ga		22
<210> 79		
<211> 22		

22259-10-1US.ST25.txt

<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 79
tgactgtgga gcctagagat ga 22

<210> 80
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 80
tgactgtgga gcccagagat ga 22

<210> 81
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 81
tgactgtggg gcttagagat ga 22

<210> 82
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 82
tgactgtggg gctcagagat ga 22

<210> 83
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 83
tgactgtggg gcctagagat ga 22

<210> 84
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 84

tgactgtggg gcccagagat ga

<210> 85
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 85
tgactgtgaa ggtagagat ga

<210> 86
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 86
tgactgtgaa ggtcagagat ga

<210> 87
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 87
tgactgtgaa ggctagagat ga

<210> 88
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 88
tgactgtgaa ggccagagat ga

<210> 89
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 89
tgactgtgag ggtagagat ga

<210> 90
<211> 22
<212> DNA
<213> Artificial Sequence

22259-10-1US.ST25.txt

<220>
<223> immunomodulatory oligonucleotide

<400> 90
tgactgtgag ggtcagagat ga 22

<210> 91
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 91
tgactgtgag ggctagagat ga 22

<210> 92
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 92
tgactgtgag ggccagagat ga 22

<210> 93
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 93
tgactgtgga ggttagagat ga 22

<210> 94
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 94
tgactgtgga ggtcagagat ga 22

<210> 95
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 95
tgactgtgga ggctagagat ga 22

22259-10-1US.ST25.txt

<210> 96
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 96
tgactgtgga ggccagagat ga 22

<210> 97
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 97
tgactgtggg ggttagagat ga 22

<210> 98
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 98
tgactgtggg ggtcagagat ga 22

<210> 99
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 99
tgactgtggg ggctagagat ga 22

<210> 100
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 100
tgactgtggg ggccagagat ga 22

<210> 101
<211> 22
<212> DNA
<213> Artificial Sequence

<220>

22259-10-1US.ST25.txt

<223> immunomodulatory oligonucleotide

<400> 101

tgactgtgaa agttagagat ga

22

<210> 102

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<400> 102

tgactgtgaa agtcagagat ga

22

<210> 103

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<400> 103

tgactgtgaa agctagagat ga

22

<210> 104

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<400> 104

tgactgtgaa agccagagat ga

22

<210> 105

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<400> 105

tgactgtgag agttagagat ga

22

<210> 106

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<400> 106

tgactgtgag agtcagagat ga

22

<210> 107

22259-10-1US.ST25.txt

<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 107
tgactgtgag agctagagat ga 22

<210> 108
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 108
tgactgtgag agccagagat ga 22

<210> 109
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 109
tgactgtgga agtttagagat ga 22

<210> 110
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 110
tgactgtgga agtcagagat ga 22

<210> 111
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 111
tgactgtgga agctagagat ga 22

<210> 112
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

22259-10-1US.ST25.txt

<400> 112
tgactgtgga agccagagat ga 22

<210> 113
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 113
tgactgtggg agtttagagat ga 22

<210> 114
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 114
tgactgtggg agtcagagat ga 22

<210> 115
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 115
tgactgtggg agcttagagat ga 22

<210> 116
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 116
tgactgtggg agccagagat ga 22

<210> 117
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 117

tgactgtgaa ngttagagat ga

<210> 118
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 118
tgactgtgaa ngtcagagat ga

<210> 119
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 119
tgactgtgaa ngctagagat ga

<210> 120
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 120
tgactgtgaa ngccagagat ga

<210> 121
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>

22259-10-1US.ST25.txt

<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 121
tgactgtgag ngttagagat ga 22

<210> 122
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 122
tgactgtgag ngtcagagat ga 22

<210> 123
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 123
tgactgtgag ngctagagat ga 22

<210> 124
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 124
tgactgtgag ngccagagat ga 22

<210> 125
<211> 22
<212> DNA
<213> Artificial Sequence

22259-10-1US.ST25.txt

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 125
tgactgtgga ngttagagat ga

22

<210> 126
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 126
tgactgtgga ngtcagagat ga

22

<210> 127
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 127
tgactgtgga ngctagagat ga

22

<210> 128
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 128
tgactgtgga ngccagagat ga

22

22259-10-1US.ST25.txt

<210> 129
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 129
tgactgtggg ngttagagat ga

22

<210> 130
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 130
tgactgtggg ngtcagagat ga

22

<210> 131
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 131
tgactgtggg ngctagagat ga

22

<210> 132
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

22259-10-1US.ST25.txt

<400> 132
tgactgtggg ngccagagat ga 22

<210> 133
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 133
tgactgtgaa ncttagagat ga 22

<210> 134
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 134
tgactgtgaa nctcagagat ga 22

<210> 135
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 135
tgactgtgaa nccttagagat ga 22

<210> 136
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

22259-10-1US.ST25.txt

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 136
tgactgtgaa ncccagagat ga 22

<210> 137
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 137
tgactgtgag ncttagagat ga 22

<210> 138
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 138
tgactgtgag ntcagagat ga 22

<210> 139
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 139
tgactgtgag ncctagagat ga 22

<210> 140
<211> 22
<212> DNA

22259-10-1US.ST25.txt

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<220>

<221> misc_feature

<222> (11)..(11)

<223> n is Inosine

<400> 140

tgactgtgag nccccagagat ga

22

<210> 141

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<220>

<221> misc_feature

<222> (11)..(11)

<223> n is Inosine

<400> 141

tgactgtgga ncttagagat ga

22

<210> 142

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<220>

<221> misc_feature

<222> (11)..(11)

<223> n is Inosine

<400> 142

tgactgtgga nctcagagat ga

22

<210> 143

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<220>

<221> misc_feature

<222> (11)..(11)

<223> n is Inosine

<400> 143

tgactgtgga nccttagagat ga

22

22259-10-1US.ST25.txt

<210> 144
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 144
tgactgtgga ncccagagat ga 22

<210> 145
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 145
tgactgtggg ncttagagat ga 22

<210> 146
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 146
tgactgtggg ntcagagat ga 22

<210> 147
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature

22259-10-1US.ST25.txt

<222> (11)..(11)
<223> n is Inosine

<400> 147
tgactgtggg ncctagagat ga

22

<210> 148
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 148
tgactgtggg ncccagagat ga

22

<210> 149
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 149
tgactgtgaa tgttagagat ga

22

<210> 150
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 150
tgactgtgaa tgtcagagat ga

22

<210> 151
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 151
tgactgtgaa tgctagagat ga

22

<210> 152
<211> 22
<212> DNA
<213> Artificial Sequence

<220>

22259-10-1US.ST25.txt

<223> immunomodulatory oligonucleotide

<400> 152

tgactgtgaa tgccagagat ga

22

<210> 153

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<400> 153

tgactgtgag tgttagagat ga

22

<210> 154

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<400> 154

tgactgtgag tgtcagagat ga

22

<210> 155

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<400> 155

tgactgtgag tgctagagat ga

22

<210> 156

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<400> 156

tgactgtgag tgccagagat ga

22

<210> 157

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<400> 157

tgactgtgga tgttagagat ga

22

<210> 158

22259-10-1US.ST25.txt

<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 158
tgactgtgga tgtcagagat ga 22

<210> 159
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 159
tgactgtgga tgctagagat ga 22

<210> 160
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 160
tgactgtgga tgccagagat ga 22

<210> 161
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 161
tgactgtggg tgtagagat ga 22

<210> 162
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 162
tgactgtggg tgtcagagat ga 22

<210> 163
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

22259-10-1US.ST25.txt

<400> 163
tgactgtggg tgctagagat ga 22

<210> 164
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 164
tgactgtggg tgccagagat ga 22

<210> 165
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 165
tgactgtgaa tattagagat ga 22

<210> 166
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 166
tgactgtgaa tatcagagat ga 22

<210> 167
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 167
tgactgtgaa tactagagat ga 22

<210> 168
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 168
tgactgtgaa taccagagat ga 22

<210> 169
<211> 22
<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<400> 169

tgactgtgag tattagagat ga

22

<210> 170

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<400> 170

tgactgtgag tatcagagat ga

22

<210> 171

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<400> 171

tgactgtgag tactagagat ga

22

<210> 172

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<400> 172

tgactgtgag taccagagat ga

22

<210> 173

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<400> 173

tgactgtgga tattagagat ga

22

<210> 174

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<400> 174

tgactgtgga tatcagagat ga

22

22259-10-1US.ST25.txt

<210> 175
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 175
tgactgtgga tactagagat ga 22

<210> 176
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 176
tgactgtgga taccagagat ga 22

<210> 177
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 177
tgactgtggg tattagagat ga 22

<210> 178
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 178
tgactgtggg tatcagagat ga 22

<210> 179
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 179
tgactgtggg tactagagat ga 22

<210> 180
<211> 22
<212> DNA
<213> Artificial Sequence

22259-10-1US.ST25.txt

<220>
<223> immunomodulatory oligonucleotide

<400> 180
tgactgtggg taccagagat ga 22

<210> 181
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 181
tgactgtgaa cgttagagat ga 22

<210> 182
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 182
tgactgtgaa ccttagagat ga 22

<210> 183
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 183
tgactgtgat gcttagagat ga 22

<210> 184
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 184
tgactgtgat gctcagagat ga 22

<210> 185
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 185
tgactgtgat gccttagagat ga 22

22259-10-1US.ST25.txt

<210> 186
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 186
tgactgtgat gcccagagat ga 22

<210> 187
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 187
tgactgtgac gcttagagat ga 22

<210> 188
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 188
tgactgtgac gctcagagat ga 22

<210> 189
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 189
tgactgtgac gcctagagat ga 22

<210> 190
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 190
tgactgtgac gcccagagat ga 22

<210> 191
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

22259-10-1US.ST25.txt

<400> 191
tgactgtggt gcttagagat ga 22

<210> 192
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 192
tgactgtggt gtcagagat ga 22

<210> 193
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 193
tgactgtggt gcctagagat ga 22

<210> 194
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 194
tgactgtggt gcccagagat ga 22

<210> 195
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 195
tgactgtggc gcttagagat ga 22

<210> 196
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 196
tgactgtggc gtcagagat ga 22

<210> 197
<211> 22

22259-10-1US.ST25.txt

<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 197
tgactgtggc gcctagagat ga 22

<210> 198
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 198
tgactgtggc gcccagagat ga 22

<210> 199
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 199
tgactgtgat gtttagagat ga 22

<210> 200
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 200
tgactgtgat ggtcagagat ga 22

<210> 201
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 201
tgactgtgat ggctagagat ga 22

<210> 202
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 202

tgactgtgat ggccagagat ga

<210> 203
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 203
tgactgtgac ggtagagat ga

<210> 204
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 204
tgactgtgac ggtcagagat ga

<210> 205
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 205
tgactgtgac ggctagagat ga

<210> 206
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 206
tgactgtgac ggccagagat ga

<210> 207
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 207
tgactgtggt ggtagagat ga

<210> 208
<211> 22
<212> DNA
<213> Artificial Sequence

22259-10-1US.ST25.txt

<220>
<223> immunomodulatory oligonucleotide

<400> 208
tgactgtggt ggtcagagat ga 22

<210> 209
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 209
tgactgtggt ggctagagat ga 22

<210> 210
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 210
tgactgtggt ggccagagat ga 22

<210> 211
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 211
tgactgtggc ggtagagat ga 22

<210> 212
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 212
tgactgtggc ggtcagagat ga 22

<210> 213
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 213
tgactgtggc ggctagagat ga 22

22259-10-1US.ST25.txt

<210> 214
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 214
tgactgtggc ggccagagat ga 22

<210> 215
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 215
tgactgtgat agttagagat ga 22

<210> 216
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 216
tgactgtgat agtcagagat ga 22

<210> 217
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 217
tgactgtgat agcttagagat ga 22

<210> 218
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 218
tgactgtgat agccagagat ga 22

<210> 219
<211> 22
<212> DNA
<213> Artificial Sequence

<220>

22259-10-1US.ST25.txt

<223> immunomodulatory oligonucleotide
<400> 219
tgactgtgac agtttagagat ga 22

<210> 220
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide
<400> 220
tgactgtgac agtcagagat ga 22

<210> 221
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide
<400> 221
tgactgtgac agcttagagat ga 22

<210> 222
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide
<400> 222
tgactgtgac agccagagat ga 22

<210> 223
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide
<400> 223
tgactgtggt agtttagagat ga 22

<210> 224
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide
<400> 224
tgactgtggt agtcagagat ga 22

<210> 225

22259-10-1US.ST25.txt

<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 225
tgactgtggt agcttagagat ga

22

<210> 226
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 226
tgactgtggt agccagagat ga

22

<210> 227
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 227
tgactgtggc agtttagagat ga

22

<210> 228
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 228
tgactgtggc agtcagagat ga

22

<210> 229
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 229
tgactgtggc agcttagagat ga

22

<210> 230
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

22259-10-1US.ST25.txt

<400> 230

tgactgtggc agccagagat ga

22

<210> 231

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<220>

<221> misc_feature

<222> (11)..(11)

<223> Inosine

<220>

<221> misc_feature

<222> (11)..(11)

<223> n is Inosine

<400> 231

tgactgtgat ngttagagat ga

22

<210> 232

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<220>

<221> misc_feature

<222> (11)..(11)

<223> n is Inosine

<400> 232

tgactgtgat ngtcagagat ga

22

<210> 233

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<220>

<221> misc_feature

<222> (11)..(11)

<223> n is Inosine

<400> 233

tgactgtgat ngctagagat ga

22

<210> 234

<211> 22

<212> DNA

<213> Artificial Sequence

22259-10-1US.ST25.txt

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 234
tgactgtgat ngccagagat ga

22

<210> 235
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 235
tgactgtgac ngttagagat ga

22

<210> 236
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 236
tgactgtgac ngtcagagat ga

22

<210> 237
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 237
tgactgtgac ngctagagat ga

22

22259-10-1US.ST25.txt

<210> 238
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 238
tgactgtgac ngccagagat ga 22

<210> 239
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 239
tgactgtggc ngtagagat ga 22

<210> 240
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 240
tgactgtggc ngtcagagat ga 22

<210> 241
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (11)..(11)

22259-10-1US.ST25.txt

<223> n is Inosine

<400> 241

tgactgtggt ngctagagat ga

22

<210> 242

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<220>

<221> misc_feature

<222> (11)..(11)

<223> n is Inosine

<400> 242

tgactgtggt ngccagagat ga

22

<210> 243

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<220>

<221> misc_feature

<222> (11)..(11)

<223> n is Inosine

<400> 243

tgactgtggc ngttagagat ga

22

<210> 244

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

<220>

<221> misc_feature

<222> (11)..(11)

<223> n is Inosine

<400> 244

tgactgtggc ngtcagagat ga

22

<210> 245

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> immunomodulatory oligonucleotide

22259-10-1US.ST25.txt

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 245
tgactgtggc ngcttagagat ga 22

<210> 246
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 246
tgactgtggc ngccagagat ga 22

<210> 247
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 247
tgactgtgat ncttagagat ga 22

<210> 248
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 248
tgactgtgat nctcagagat ga 22

<210> 249
<211> 22

22259-10-1US.ST25.txt

<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 249
tgactgtgat ncctagagat ga

22

<210> 250
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 250
tgactgtgat ncccagagat ga

22

<210> 251
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 251
tgactgtgac ncttagagat ga

22

<210> 252
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 252

tgactgtgac nctcagagat ga

<210> 253
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 253
tgactgtgac ncctagagat ga

<210> 254
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 254
tgactgtgac ncccagagat ga

<210> 255
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 255
tgactgtggt ncttagagat ga

<210> 256
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>

22259-10-1US.ST25.txt

<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 256
tgactgtggt nctcagagat ga

22

<210> 257
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 257
tgactgtggt ncctagagat ga

22

<210> 258
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 258
tgactgtggt ncccagagat ga

22

<210> 259
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 259
tgactgtggc ncttagagat ga

22

<210> 260
<211> 22
<212> DNA
<213> Artificial Sequence

22259-10-1US.ST25.txt

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 260
tgactgtggc nctcagagat ga

22

<210> 261
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 261
tgactgtggc ncctagagat ga

22

<210> 262
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is Inosine

<400> 262
tgactgtggc ncccagagat ga

22

<210> 263
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 263
tgactgtgat tgttagagat ga

22

<210> 264
<211> 22
<212> DNA
<213> Artificial Sequence

<220>

22259-10-1US.ST25.txt

<223> immunomodulatory oligonucleotide

<400> 264
tgactgtgat tgtcagagat ga

22

<210> 265
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 265
tgactgtgat tgctagagat ga

22

<210> 266
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 266
tgactgtgat tgccagagat ga

22

<210> 267
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 267
tgactgtgac tgttagagat ga

22

<210> 268
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 268
tgactgtgac tgtcagagat ga

22

<210> 269
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 269
tgactgtgac tgctagagat ga

22

<210> 270

22259-10-1US.ST25.txt

<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 270
tgactgtgac tgccagagat ga 22

<210> 271
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 271
tgactgtggc tgtagagat ga 22

<210> 272
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 272
tgactgtggc tgtagagat ga 22

<210> 273
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 273
tgactgtggc tgtagagat ga 22

<210> 274
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 274
tgactgtggc tgccagagat ga 22

<210> 275
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

22259-10-1US.ST25.txt

<400> 275
tgactgtggc tgttagagat ga 22

<210> 276
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 276
tgactgtggc tgtcagagat ga 22

<210> 277
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 277
tgactgtggc tgctagagat ga 22

<210> 278
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 278
tgactgtggc tgccagagat ga 22

<210> 279
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 279
tgactgtgat tattagagat ga 22

<210> 280
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 280
tgactgtgat tatcagagat ga 22

<210> 281
<211> 22
<212> DNA

22259-10-1US.ST25.txt

<213> Artificial Sequence
<220>
<223> immunomodulatory oligonucleotide
<400> 281
tgactgtgat tactagagat ga 22

<210> 282
<211> 22
<212> DNA
<213> Artificial Sequence
<220>
<223> immunomodulatory oligonucleotide
<400> 282
tgactgtgat taccagagat ga 22

<210> 283
<211> 22
<212> DNA
<213> Artificial Sequence
<220>
<223> immunomodulatory oligonucleotide
<400> 283
tgactgtgac tattagagat ga 22

<210> 284
<211> 22
<212> DNA
<213> Artificial Sequence
<220>
<223> immunomodulatory oligonucleotide
<400> 284
tgactgtgac tatcagagat ga 22

<210> 285
<211> 22
<212> DNA
<213> Artificial Sequence
<220>
<223> immunomodulatory oligonucleotide
<400> 285
tgactgtgac tactagagat ga 22

<210> 286
<211> 22
<212> DNA
<213> Artificial Sequence
<220>
<223> immunomodulatory oligonucleotide
<400> 286
tgactgtgac taccagagat ga 22

22259-10-1US.ST25.txt

<210> 287
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 287
tgactgtggt tattagagat ga 22

<210> 288
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 288
tgactgtggt tatcagagat ga 22

<210> 289
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 289
tgactgtggt tactagagat ga 22

<210> 290
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 290
tgactgtggt taccagagat ga 22

<210> 291
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 291
tgactgtggc tattagagat ga 22

<210> 292
<211> 22
<212> DNA
<213> Artificial Sequence

22259-10-1US.ST25.txt

<220>
<223> immunomodulatory oligonucleotide

<400> 292
tgactgtggc tatcagagat ga 22

<210> 293
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 293
tgactgtggc tactagagat ga 22

<210> 294
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 294
tgactgtggc taccagagat ga 22

<210> 295
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 295
tgactgtgat cgtagagat ga 22

<210> 296
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> immunomodulatory oligonucleotide

<400> 296
tgactgtgac cgtagagat ga 22